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An Essay
on
Cynanche Trachealis
for the degree
of
Doctor of Medicine
by
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of
The District of Columbia.
1810

An Essay &c.

By Cynanche Trachealis

we mean a disease of an inflammatory nature affecting the Glottis, the Larynx, the membranes connected with these, the contiguous muscles, or one or all of the parts enumerated —

To recount the varieties of opinion and practice of those physicians who have given to the world their observations on Cynanche Trachealis, would probably contribute little to the value of this essay: and moreover, it is a task that has been already frequently performed on similar occasions. It may however be gratifying to curiosity, (and it is a tribute of respect which they surely deserve,) to notice a few of the most remarkable productions, on the subject of the disease in question, with which I have had communication, or of which I have been informed —

Among the authors then of the more valuable treatises on Cynanche Trachealis,

I believe Forestus is allowed to occupy a very high rank. In his work published in 1634, in which he takes a view, as the title imports, of the causes, symptoms, and cures of all the diseases to which the human body is liable, we are struck with the record of this then little investigated disease. His chapter "De Cynanche vera musculos internos laryngis occupante"; and his succeeding comments on the case recorded in it, present us with a minute consideration of the causes, an accurate description of the symptoms, and a judicious application of remedies, the propriety of which the present advanced state of our science confirms. This part of his work is indeed an earnest of its general excellence, and would probably do credit to a physician, whose existence in far later times has been attended by the attainment of a more certain knowledge of the real nature of Cynanche trachealis —

The next regular history of this disease is said to have been given about 1749. by an Italian physician of the name of Ghisi, and considerably later in the same century, Michaelis made a large contribution to the mass of medical writing. In the course of

his work we observe a lengthy chapter "De Squi-
=nantia", and doubtless at the period of its publi-
=cation, it was very highly esteemed —

Since the time of the last mentioned author, until very lately, the investigation of the Cynan=che Trachealis would appear to have been almost suspended — our medical records offer us no other proofs than a few irregular & inac=curate essays, that it at all attracted the atten=tion of physicians —

It was reserved for the European and American medical men of the present time, to inquire successfully into the circumstances of this disease. The result of their examina=tions has been the establishment of a prac=tice so correct and appropriate, as to deprive the Cynanche Trachealis of that power of destruction, which it had so long preserved. — To arrange and describe as well as my time, and limited oppor=tunity of observation will permit, the causes, symptoms, & cure as now ascer=tained, is the object of the succeeding pages —

all those causes that act in the production of fever, may with much reason be believed to occa=sionally excite the cynanche trachealis; indeed it is acknowledged that the most frequent sources of this last are to be sought for in the sensible qualities of the atmosphere - Its rapid transition from heat to cold, and the reverse, have undoubt=edly much influence in the formation of this disease, and if we consider the nature of the seasons in which it most frequently appears, we are warranted in concluding, that this particular effect of these changes is propor=tioned to their suddenness and degree -

The attack of the Cynanche Trachealis is sometimes sudden, or preceded by an indis-posi=tion so slight and of so short duration, as to be scarcely observable -

More frequently however it is announced by a dry cough, with shivering and other symptoms of fever - a tendency to vomit is asserted by many authors, to be here a common symptom - The disease, if per=mitted to progress, soon begins to give

those local evidences of its existence, by which it is so strongly characterized - a sense of uneasiness about the larynx, difficult respiration attended by a wheezing noise, a voice and cough with which most physicians are acquainted, and which are as difficult to describe, as they are easy to recognize on having once been heard, confirm the disease in its formed state —

The pulse from the beginning is full and frequent, the face flushed, (tho' sometimes pale, as in the remissions of a mild attack) and the patients restlessness and anxiety are now hourly augmented. Drowsiness here becomes a very general symptom, unless when suspended by a fit of coughing, or that feeling about the larynx which threatens suffocation - These periods may properly enough be termed exacerbations, during which the usual sonorous breathing is exchanged for a violent struggle, to prevent suffocation as it were, accompanied with

what has been called a crowing noise. I have mentioned above that this disease remits occasionally - This is allowed I believe by all physicians, and they concur, moreover, in the opinion that the day is the usual season of these remissions -

If it be not soon arrested by the remedies to be hereafter detailed, every hour gives additional proof of the increasing power of the disease over the life of the patient -

In its progress to a fatal event, the difficulty of breathing becomes gradually greater, as is shewn by the violent action of the muscles of the thorax and abdomen - The patient tho' extremely disposed to sleep, cannot effect it for the distressing fear of suffocation - The pulse becomes small and quick, and at length tremulous - The sense of strangulation increases to an agonizing degree, and the wretched sufferer, now in the pangs of death, struggles convulsively for the continuance of that life,

whose early termination shall relieve him from one of the highest grades of human pain and misery —

The duration of the complaint varies much, and depends in a great measure on the degree of violence in the attack, and on the strength and constitution of the patient. In some cases it proves fatal in a few hours, in others it is "protracted in a chronic or feeble "form for six, eight, or ten days", but most frequently, its result is ascertained in from one to three days —

Children between the ages of three months and five years are the most frequent subjects of this disease. In 1799. the Cynanche Trachealis was said to be "epidemic in Alexandria and the "adjacent country, and it extended itself in "numerous instances to children of eight, ten, "and twelve years of age, and, in half a dozen "instances at least, to adults of different ages" (vide Phil.a Med.l & Phys.l Journal - May 1809. Dr. Dicks communication.) It is now no longer doubted to attack adults: indeed, examples of this, though they are comparatively rare, occur to almost every practitioner

Being about to proceed to the narration of the most approved treatment of Cynanche Tracheali, I would premise, that though the distinction of Spasmodic and Inflammatory, is undoubtedly a well-founded one, I am not aware that this fact leads to any practical difference — The two species are believed, I think, by physi=cians rarely to occur distinctly, and though by the predominance of the one or the other at certain stages of the complaint, the symp=tomy may be a little altered, the more prominent remedies for each are still the same — Is it not agreed that the spasm is most generally occasioned by a greater or lesser degree of inflammation about the larynx, & vice versa? I believe it is, and experience clearly points to the mode of treatment which ought to be pursued in both cases — We will bleed then for the solution of this spasm, whether it be a cause or a consequence of Inflammation —

The approach of the Cynanche Trachealis may be suspected in all children on the occurrence of "hoarseness, and a slight degree of stertorous cough", but these symptoms should be particularly attended to in children who have had former attacks of it - As yet the disease is completely under the controul of an emetic - This, indeed, is a truth so generally known wherever the disease is common, that few of those families in which it has once appeared, are to be found unprovided with some one or other of the medicines of this class - On the first symptom of its approach, this excellent preventive is administered, and the child is rescued if not from death, at least from a painful & distressing complaint - I may add, that there are some diseases, with which the one in question may be confounded in its forming state, or which may be mistaken for it - But here another advantage of our prophylactic discovery itself. So far from being of disservice in these, it assists greatly in alleviating, and in removing them.

I allude to catarrh, and the diseases of the fauces. Besides, the exhibition of a single emetic, though not absolutely necessary, is productive of little or no inconvenience, at the age most liable to this disease —

When the Cynanche Trachealis has progressed beyond that point at which our reliance is to be placed on an emetic alone, this should be succeeded by other remedies to be presently mentioned — To mark with some precision the point alluded to, the failure of the emetic in its operation, or in its expected effect, will I think, be sufficient — Before leaving the subject of emetics, I would mention, that it is the practice of many physicians, to accompany their use with the warm bath. It promotes the operation of the former remedy; and indeed, it is said to have alone cured the disease, by exciting a profuse perspiration —

These means however are in many cases incapable of subduing the force of the attack, and now the Lancet is to be resorted to. It is, as yet, an undecided point to what lengths

this remedy is to be immediately carried - The great experience of professor Rush decides in favour of the frequent detraction of small quantities of blood - Dr. Dick of alexandria prescribes, on the contrary, bleeding ad deliquium animi, and his practice is certainly successful in the extreme - my observation of it, advantages, when carried to this extent in the hands of the latter, would induce me to follow his example. The happy result of each mode of treatment cannot be doubted: and if there is any difference in the degree of success attendant on the two methods, my actual acquaintance with the one, and the general knowledge alone which I possess of the other, would render it presuming in me to attempt a decision on the superiority of either. — May there not be certain circumstances in each particular case to direct us; and should we not bleed more copiously to relieve that spasm which threatens the speedy extinction of life, than to suppress that inflammation which only menaces the production of spasm, or an obstruction thro' the medium of a membranous concretion which may

be eventually fatal? —

When the bloodletting has not been extended to such length as to produce fainting, or has not been copious enough to check the disease, it is customary with many practitioners to repeat the emetic and warm bath; and now should the symptoms continue to be urgent, they proceed to renew their efforts with the lancet, even till it has occasioned deliquium animi — Under these circumstances they assert that they are "invariably successful" —

Topical depletion, by means of cups & Leeches, is highly recommended as auxiliary to the above remedies, and I should suppose it would be had recourse to with the best effects, before that period when the more profuse depletion is found necessary —

Blisters to the "throat, breast, neck, and even limbs" would seem well deserving of the high character bestowed on them in this disease, by many writers —

When the force of the disease is broken, as is shewn by the diminution of hoarseness, and the decreasing difficulty of respiration, purges have been next exhibited by most practitioners. Many physicians prescribe them in the earlier stages of the disease, but I conceive that the mode of evacuation above mentioned, is more adapted to meeting the violent local symptoms - While the disease is yet lingering about the patient the thorough opening of the bowels is a most important point; it obviates a relapse, and almost insures the convalescence - Calomel is the medicine most generally given with this view, and in such doses, as speedily and actively to purge —

The violent symptoms having been made to disappear, it frequently happens that the patient is troubled by a remaining cough & hoarseness, with deficient expectoration - The polygala senega, so highly commended in Cynanche Trachealis by Dr Archer, here proves an excellent expectorant, and from what little I have seen of its use, I cannot

but think it best adapted to the removal of the symptoms just mentioned - Doubtless, however it may be used advantageously, as an emetic at an earlier period -

When little or no morbid excitement remains, the cough may be much relieved by a few drops of liquid laudanum - Dr. Rush says "they often produce the most "salutary effects - They should be given "he adds" in flaxseed, or bran, or onion tea, of "which drinks the patient should take "freely, during every stage of the disease"

The operation of Tracheotomy has been proposed to be performed when the fatal issue of a case may with certainty be expected - To those who are better qualified to determine on the propriety of this last resort, I leave its consideration - It must however be a pleasing reflection to physicians, that their assistance, when solicited in proper season, can render unnecessary this apparently desperate alternative -

I have omitted to mention the appearances on dissection, because I have never witness-

=ed the examination of a person who had died of this disease -

It remains for me to offer to the professors of the University my highest respects —